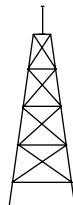




7136 Eagle Rd. · Willoughby, OH 44094  
(440) 942-2133 · <http://modtech-corp.com>



800 to 869 MHz  
DIRECTIONAL

# SIPS-BDA-800E

Portable In-Building Communications System  
For 800 MHz Public Safety Radio Applications

- Restore 2-way radio communications through metal, heavy masonry, or other structures
- Designed to meet best practices per NPSTC and NFPA
- Lightweight, rugged system transports easily

800 to 869 MHz  
OMNI



**INDOOR  
KIT**

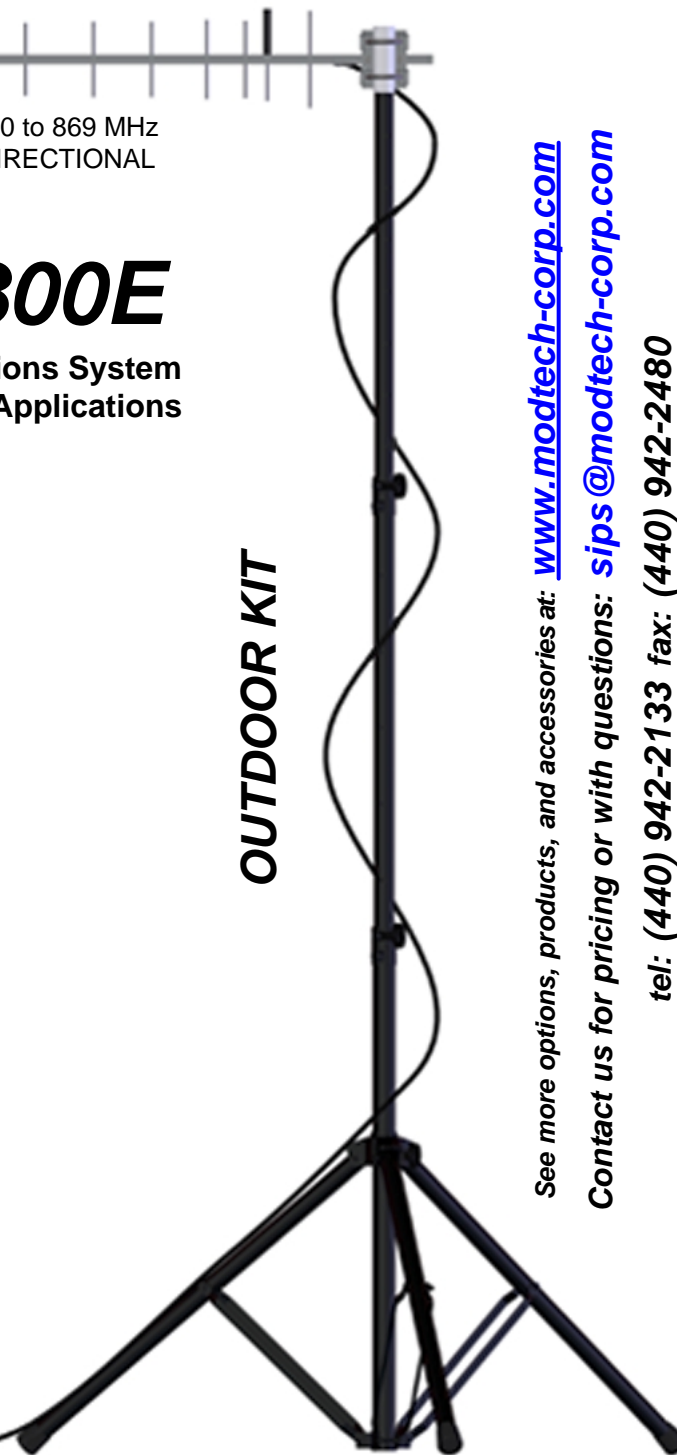
- Setup in just a few minutes
- Connect easily to existing building antenna systems
- 12-hour runtime with **Li-ion** batteries (expandable in 3 hour increments)
- Can be powered / recharged from external AC or DC sources
- Recharge radio batteries with available AC or DC outputs

**INSIDE**

**BUILDING WALL, ROOF, OR OTHER BARRIER**

**OUTSIDE**

**OUTDOOR KIT**



See more options, products, and accessories at: [www.modtech-corp.com](http://www.modtech-corp.com)  
Contact us for pricing or with questions: [sips@modtech-corp.com](mailto:sips@modtech-corp.com)

tel: (440) 942-2133 fax: (440) 942-2480



# SIPS-BDA-800E

Portable In-Building Communications System  
For 800 MHz Public Safety Radio Applications

## General

### Environmental

Operating temp range ( C )	-20 to 50
Humidity	90% rel. noncondensing
Altitude (m)	3000
Battery run time (hr)	12
System setup time (min)	<4

**Rugged  
Watertight  
Enclosure**

**Hot-swappable  
Expandable  
Battery  
Subsystem**



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## Preliminary Information January 2009

### Case # 1 - Bi-directional amplifier, power supply, and indoor antenna kit

<b>Case</b>	
Type	Heavy duty injection molded polypropylene
Length (in)	25
Height (in)	20
Depth (in)	12
Total loaded weight (lb)	52
Other	Roller blade style wheels with retractable handle
<b>Power</b>	
Type	Standalone or UPS mode
AC Input	
Type	ACI-100 modular / hot-swappable
Voltage (VAC)	90 to 264
Frequency	47 to 63 Hz
Input power (VA)	120
Backup / Standalone Battery	
Type	EM-100 modular / hot-swappable
Chemistry	Lithium-ion
Battery run time (hr)	12
Charging	In place with AC input
<b>Bi-directional Amplifier</b>	
Frequency (MHz)	806 to 824 & 851 to 866
Gain (dB)	80
Linear Output Power (dBm, typ)	30
Propagation delay (nsec)	<250
Noise figure (dB)	5.5
Gain control	AGC + MANUAL
Overload protection	Shutdown with auto-recovery
Transport / mount	Integral with case # 1
<b>Omnidirectional Indoor Antenna</b>	
Frequency (MHz)	806 to 868
Gain (dBi)	0
VSWR	1.5:1
Bandwidth (1.5:1, MHz)	62
3dB Beamwidth E-Plane (deg)	75
Power Handling (W)	150
Element Type	Plated copper laminate
Enclosure	Fiberglass
Height (in)	17.5
Transport	Within power supply case
Mount	Quick snap connect on power supply case
Standard cable length (ft)	1

### Case # 2 - Outdoor Directional Antenna Kit

<b>Case</b>	
Type	Heavy duty padded nylon bag, dual zippered, dual hand straps
Length (in)	60
Height (in)	10
Depth (in)	12
Total loaded weight (lb)	38
<b>Stand</b>	
Type	Heavy duty tripod stand
Stand height (in)	Adjustable 44 to 120
Stand base spread (in)	Adjustable 38 to 58
Weight (lb)	17
Color	Black
Transport	In case # 2
Mount	Free standing on level surface
<b>Directional Yagi Outdoor Antenna</b>	
Frequency (MHz)	806 to 866
Gain (dBd)	11
Number of Elements	10
Front to Back Ratio (dB)	20
3dB Beamwidth E-Plane (deg)	40
3dB Beamwidth H-Plane (deg)	45
Power Handling (W)	200
Element Type	Aluminum Rod
Length (in)	46
Element Height (in)	4 to 7
Weight (lb)	1.6
Transport	In scabbard within case # 2
Mount	Quick connect to stand
Standard cable length (ft)	100
Cable attenuation(dB @ 800MHz)	4.5

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